

IN THE CLAIMS

This listing of claims replaces all prior listings

Listing of Claims:

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1. (Currently Amended) A magnetic head using magnetoresistive effect comprising:
a magnetic sensing portion formed of a magnetoresistive effect element, wherein:
said magnetic sensing portion includes a lamination layer structure portion in which at
least a free layer made of a soft magnetic material ~~of in~~ in which the magnetization is ~~rotated~~
rotatable in response to an external magnetic field, a fixed layer made of a ferromagnetic
material, an antiferromagnetic layer for fixing the magnetization of said fixed layer, and a spacer
layer interposed between said free layer and said fixed layer are laminated ~~with each other~~
together in a thickness direction of the magnetic sensing portion;

said lamination layer structure portion further includes a magnetic flux introducing layer
of which ~~the tip~~ a side end surface is opposed to a surface of the magnetic head which is brought
in contact with or opposed to a magnetic recording medium;

said lamination layer structure portion has ~~at its lamination layer~~ along the thickness
direction opposing side surfaces of at least said free layer, said spacer layer and said fixed layer
formed of one flat surface or one continuous ~~one~~ curved surface ~~over at least said free layer, said~~
~~spacer layer and said fixed layer;~~

a hard magnetic layer ~~having high resistance or low resistance~~ for maintaining a magnetic
stability of said free layer is disposed in direct contact with said opposing surfaces or through an
insulating layer;

a sense current for said lamination layer structure portion flows through ~~the lamination~~
~~layer direction of~~ said lamination layer structure portion in the thickness direction; and

an external magnetic field is applied to the direction extended along the plane direction of
said lamination layer structure portion and which is extended substantially along said opposing
side surfaces.

2. (Currently Amended) A magnetic head using magnetoresistive effect comprising:
a magnetic sensing portion formed of a magnetoresistive effect element,